## What is claimed is:

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- 1. An electronic imaging apparatus comprising:
  - a connecting section connected to an optical apparatus;
- a first optical element having a preset transmittance with respect to light in a preset wavelength region, incident from the optical apparatus; and
- an electronic image sensor receiving the light transmitted through the first optical element.
- 2. An electronic imaging apparatus according to claim 1, wherein the first optical element has a transmittance of  $50 \pm 10$  % or less.
- 3. An electronic imaging apparatus according to claim 2, wherein the first optical element is placed so that a coated surface of the first optical element satisfies the following condition:

$$2 \times L1 \times tan \ 2\theta + L1 \times tan \ 4\theta \ge L2 / 2$$

- where L1 is a distance extending along an optical axis from the coated surface of the first optical element to a light-receiving surface of the electronic image sensor, L2 is a length of a minor side of an effective imaging area in a light-receiving section of the electronic image sensor, and  $\theta$  is an angle made by a reference axis with the coated surface of the first optical element, where a direction perpendicular to the optical axis is assumed as the reference axis.
  - 4. An electronic imaging apparatus according to claim 2, wherein the first optical element is provided to be movable in and out of an optical path.
  - 5. An electronic imaging apparatus according to claim 1, further comprising a second optical element placed adjacent to the first optical element, the first optical

element and the second optical element having a transmittance of 50 % or less with respect to light in a wavelength range from 700 to 900 nm, of light incident from the optical apparatus.

6. An electronic imaging apparatus according to claim 5, wherein one of the first optical element and the second optical element, closer to the electronic image sensor, is placed to satisfy the following condition:

$$2 \times L1 \times \tan 2\theta + L1 \times \tan 4\theta > L2/2$$

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where L1 is a distance extending along an optical axis from a surface, situated on an opposite side of the electronic image sensor, of the optical element closer to the electronic image sensor to a light-receiving surface of the electronic image sensor, L2 is a length of a minor side of an effective imaging area in a light-receiving section of the electronic image sensor, and  $\theta$  is an angle made by a reference axis with the surface, situated on an opposite side of the electronic image sensor, of the optical element closer to the electronic image sensor, where a direction perpendicular to the optical axis is assumed as the reference axis.

- 7. An electronic imaging apparatus according to claim 5, wherein the first optical element and the second optical element are provided to be movable in and out of an optical path.
- 8. A photographic camera connecting adapter, interposed between an optical apparatus and a photographic camera, comprising:
  - a first connecting section connected to the optical apparatus;
  - a second connecting section connected to the photographic camera; and
- an optical element having a preset transmittance with respect to light in a preset wavelength region, incident from the optical apparatus.

- 9. A photographic camera connecting adapter according to claim 8, wherein the optical element has a transmittance of  $50 \pm 10$  % or less.
- 10. A photographic camera connecting adapter according to claim 9, wherein the optical element is placed so that a coated surface of the optical element satisfies the following condition:

$$2 \times L1 \times \tan 2\theta + L1 \times \tan 4\theta \ge L2/2$$

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where L1 is a distance extending along an optical axis from the coated surface of the optical element to a light-receiving surface of an electronic image sensor, L2 is a length of a minor side of an effective imaging area in a light-receiving section of the electronic image sensor, and  $\theta$  is an angle made by a reference axis with the coated surface of the optical element, where a direction perpendicular to the optical axis is assumed as the reference axis.

- 11. A photographic camera connecting adapter according to claim 9, wherein the optical element is provided to be movable in and out of an optical path.
- 12. A photographic camera connecting adapter according to claim 8, further comprising a second optical element, the optical element and the second optical element having a transmittance of 50 % or less with respect to light in a wavelength range from 700 to 900 nm, of light incident from the optical apparatus.
- 13. A photographic camera connecting adapter according to claim 12, wherein one of the optical element and the second optical element, closer to an electronic image sensor, is placed to satisfy the following condition:

$$2 \times L1 \times \tan 2\theta + L1 \times \tan 4\theta \ge L2/2$$

where L1 is a distance extending along an optical axis from a surface, situated on an opposite side of the electronic image sensor, of the optical element closer to the

electronic image sensor to a light-receiving surface of the electronic image sensor, L2 is a length of a minor side of an effective imaging area in a light-receiving section of the electronic image sensor, and  $\theta$  is an angle made by a reference axis with the surface, situated on an opposite side of the electronic image sensor, of the optical element closer to the electronic image sensor, where a direction perpendicular to the optical axis is assumed as the reference axis.

- 14. A photographic camera connecting adapter according to claim 12, wherein the optical element and the second optical element are provided to be movable in and out of an optical path.
- 15. A microscope apparatus comprising:

a microscope;

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an first optical element having a preset transmittance with respect to light in a preset wavelength region, incident from the microscope; and

an electronic image sensor receiving the light transmitted through the first optical element.

- 16. A microscope apparatus according to claim 15, wherein the first optical element has a transmittance of  $50 \pm 10$  % or less.
- 17. A microscope apparatus according to claim 16, wherein the first optical element is placed so that a coated surface of the first optical element satisfies the following condition:

$$2 \times L1 \times \tan 2\theta + L1 \times \tan 4\theta \ge L2/2$$

where L1 is a distance extending along an optical axis from the coated surface of the first optical element to a light-receiving surface of the electronic image sensor, L2 is a length of a minor side of an effective imaging area in a light-receiving section of

the electronic image sensor, and  $\theta$  is an angle made by a reference axis with the coated surface of the first optical element, where a direction perpendicular to the optical axis is assumed as the reference axis.

- 18. A microscope apparatus according to claim 15, further comprising a second optical element, the first optical element and the second optical element having a transmittance of 50 % or less with respect to light in a wavelength range from 700 to 900 nm, of light incident from the microscope.
- 19. A microscope apparatus according to claim 18, wherein one of the first optical element and the second optical element, closer to the microscope, is placed to satisfy the following condition:

$$2 \times L1 \times \tan 2\theta + L1 \times \tan 4\theta \ge L2/2$$

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where L1 is a distance extending along an optical axis from a surface, situated on an opposite side of the microscope, of the optical element closer to the microscope to a light-receiving surface of the microscope, L2 is a length of a minor side of an effective imaging area in a light-receiving section of the microscope, and  $\theta$  is an angle made by a reference axis with the surface, situated on an opposite side of the microscope, of the optical element closer to the microscope, where a direction perpendicular to the optical axis is assumed as the reference axis.